

Knowledge Management Practice among Local Commercial Banks in Malaysia: A Study of Cause and Effect

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ABSTRACT

Knowledge Management (KM) practice is the beginning of the emergence of knowledge-based banking institutions. Local banks integrate KM practice as a tool for more competitive amid financial liberalization and the merging of local bank institutions era. The objectives of this study are to identify the causal factor and also the effect results of such practice among local commercial banks in Malaysia. A questionnaire survey was used as data collection technique. A population study on the Human Resource Manager in ten local commercial banks was adopted. Analysis of data affirmed that there is a relation between the cause and the effect of implementing KM practice. Findings also revealed that the increase in knowledge sharing, both horizontally and vertically, alongside with the increase in workers' efficiency, seem to be the common effects resulting from adopting the practice. It is hoped that this study served as an opening to the local banks to maximize the benefits that KM could offer.

Keywords

Knowledge Management, Commercial Bank, Financial Institutions, Banking Institutions, Information Technology

1.0 INTRODUCTION

Within the year 1989 through 1999, Malaysia experienced two financial crisis as the results of economic downturn. This financial crisis affected badly most commercial sectors including commercial bank. Following the crisis, a reformation and strategic development approach was introduced to enable commercial banks ever at the state of readiness to face challenges in the future.

Competition and pressure from outside to liberalise banking sectors shows that domestic banks are no longer protectable (Bank Negara Malaysia Annual Report, 2001). Financial liberalization as perceived under the General Treaties Framework about Service Business to eliminate hurdles for

participation gradually other than providing access to ASEAN particularly, shows that Malaysia could not isolate itself. Therefore local banks should be made ready to face challenges and competition in the globalisation process through the increase use of information technology.

Why banks should adopt knowledge management (KM) practice? The merging of banking institutions is a current phenomenon aims to benefit from economic of scale and synergy potential in order to compete effectively and efficiently. Knowledge management is thus, could help to overcome complex issues, give quick response and made well informed and timely decision.

The development and implementation of KM programme is important to enable knowledge is sent, received, understood and used (Halim, 1999). This has to be done systematically, carefully, well planned and focused since knowledge is a power which can give untold effect. There are several main areas critical in KM practice in banks. First, the policy and the focus of KM programme. This is important to ensure every initiative taken is relevant to the objective of the organisation. Thus, the organisation's requirement for KM programme ought to be identified and a framework need to be set up so as to enable knowledge to be optimally collected, shared and used.

Second, a specific programme need to be established to improve the bank practice in forming, acquisition, transferring, sharing and retaining knowledge (refer to figure 1). This includes strategic planning to establish appropriate organisational structure. This is particularly important as the main challenge in KM programme is identifying the size of effort and potential effect at every section in the organisation. A well-planned framework is important to distribute responsibility, monitor progress and make changes in order to ensure the success of KM practice.

Third, the application of information technology (IT). This application includes project and activity to develop technology infrastructure to ensure better real time relation in

the organization and the outside world. This initiative not only focusing on the issues of retrieval, information access and sharing, but also managing surplus information received. Technology is needed to acquire, store, analyse, disseminate and increase the ability of information sharing. In the past, application of IT is focusing only on management of information system and data processing, but today a KM system is needed so as to enable the optimum exploitation of information. Therefore, IT becomes the main motivating force to KM.

Global knowledge source acquisition <i>Internet Access, Commercial Database</i>		Knowledge management in organisation <i>Direct, Real time, Continuous learning</i>	
Knowledge Sharing in Banks <i>“EDMS”, Data collection and Knowledge Godown</i>		Give value to individual knowledge <i>Corporate Register</i>	
Integrated communication network <i>E-mail</i>	Multi-function working group <i>Virtual discussion room</i>	Inter-departmental knowledge sharing <i>Intranet internal page</i>	
The Process of Knowledge Management Progress			

Figure 1: Knowledge Management Initiative in Banking Sector

KM practice also aims at nurturing knowledge culture to encourage knowledge sharing other than working in collaboration. Yet, a mechanism is required to enable communication throughout organisation so as to enable knowledge is used.

The success of KM in banking organisation is promoted by several factors. First, KM initiative ought to be relevant with the organisation's objective. Second, the readiness of the human resource to shift to knowledge based organization. Finally, the proper organizational structure together with the information technology structure need to be provided in order to implement KM.

2.0 DEFINITION OF KNOWLEDGE MANAGEMENT

KPMG Management Consulting Company (1998), defined KM as experience, fact, regulation, statement and concept about an important field to business. Nonaka (1994) said knowledge as a wise individual personal perception that increase individual capability to take effective decision. Sveiby (1994), on the other hand perceived knowledge as an object which can be translated clearly through words. When abstract knowledge is changed to the concrete form through speech or symbol, knowledge can be disseminated, criticized and analysed. It is a tool for people to react or acquire new knowledge (Computer Technology Research Group, 1998).

Knowledge involves 4 processes such as acquisition, storage, disseminating and application. KM is a process of managing knowledge systematically. The flow of knowledge process is as below.

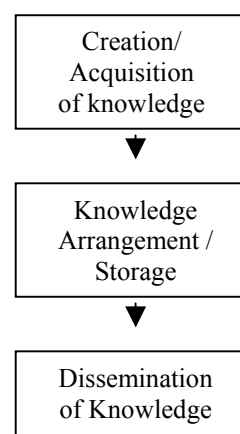


Figure 2: Knowledge Management Process (Alavi, 1999)

3.0 APPLICATION OF KNOWLEDGE MANAGEMENT

There are several example of KM application successfully implemented world wide such as:

1. Consultant Firms such as KPMG and financial institution (private sector). In Canada, Clarica Life Insurance Co. (Mutual Group) and Canadian Imperial Bank of Commerce (CIBC) are two leading financial institutions which has successfully implemented KM. Buckman Laboratories and Motorola represent the science and technology industry whilst Microsoft Corporation, Hewlett Packard and Lucent Technologies in KM (Riley, 2000).

2. World Bank centered in Washington DC is a good example in KM (public sector). The bank which release loan and technical assistant to the developing nations has branches in 80 countries. Its vision is to change from financial bank to that of knowledge. This bank defines KM as information collecting activities, liaise people and the application of experience and skill in the relevant situation (Riley, 2000). Parts of the support given to these knowledge institution include knowledge coding, developing local knowledge institution, liaise investment and dissemination of information.

This research project was carried out with the intention of knowing the causing factors and the effect of implementing knowledge management in local commercial banks in Malaysia. This intention was translated into several research questions that sought to seek information on the following aspects:

- What are the factors that caused local commercial banks in Malaysia to initiate KM practice ?
- What are the effecting results from adopting KM practice among local commercial banks in Malaysia ?
- Is there relations between both the causing and effects of implementing KM practice with that of KM

practice initiatives in the local commercial banks in Malaysia ?

It is anticipated that this study could increase understanding in knowledge theory, KM and its practice in local commercial banks in Malaysia. It is also hoped that this study could explain how KM can be used as a tool for competition that could give several advantages to organisation.

4.0 SURVEY METHODOLOGY

In order to seek answers to the research questions detailed above, it was decided to undertake a survey of local commercial banks in Malaysia. A questionnaire was developed and taken personally to a population of 10 commercial banks head office locally focusing on the Human Resource Manager. Questionnaires were completed returned by all respondents – a response rate of 100 percent. The closed ended questionnaire used was based on the instrument developed by Edler and Earl (2001) from Organization Economic Country Development with some changes to suit the purpose of this study. The data collected was processed using Statistical Package for Social Science 11.0 software with simple percentage and Chi-Square as the statistical analysis technique. The Chi-Square is used to test the research hypothesis as it is appropriate for a small sample (less than 30). Non parameter statistic such as Chi-Square is used for population sampling (Sekaran, 2000).

5.0 HYPOTHESES

Hypotheses to be tested in this study are:

- i. There is relationship between the causing factors for implementing KM with KM practice in local commercial banks in Malaysia.
- ii. There is relationship between the effects of implementing KM with KM practice in local commercial banks in Malaysia.

6.0 DATA ANALYSES AND INTERPRETATION

Hypothesis 1

Chi-square test is used to identify the relation between the causing factors of implementing KM with KM practice. The value of Chi-Square proved that relations does exist ((Chi-Square=0.935, df=63, p=0.0254) at $\alpha=0.05$) between the causing factors for implementing KM with KM practice in local commercial banks in Malaysia.

Hypothesis 2

Chi-Square is again used to identify the relationship between the effect of implementing KM with KM practice. Test indicates that there is relation ((Chi-Square =0.935, df=63, p=0.0254) at $\alpha=0.05$) between the effects of implementing KM with KM practice in local commercial banks in Malaysia.

7.0 DESCRIPTIVE STATISTIC

Other than the statistical analyses to test the hypotheses formulated as above, this study also use descriptive statistic to describe the reason or causing factors for adopting KM practice by the local commercial banks in Malaysia. Some of these causing factors are analysed individually while the others are fused together. They are presented in a series of tables and figures.

7.1 Reasons for Adopting Knowledge Management Practice

KM practice among local commercial banks are induced by the following factors:

7.1.1 Better Increase the Capability of Firms or Organisations to Compete

The analysis of data (Figure 3) showed that all respondents, 10 (100%) were able to have better capability and endurance to compete in their industries after adopting KM practice. This is the main reason that caused local commercial banks in Malaysia to initiate KM practice. Furthermore, KM practice is seen to have facilitate organisation to integrate knowledge and increase the acquisition and use of knowledge from the external sources.

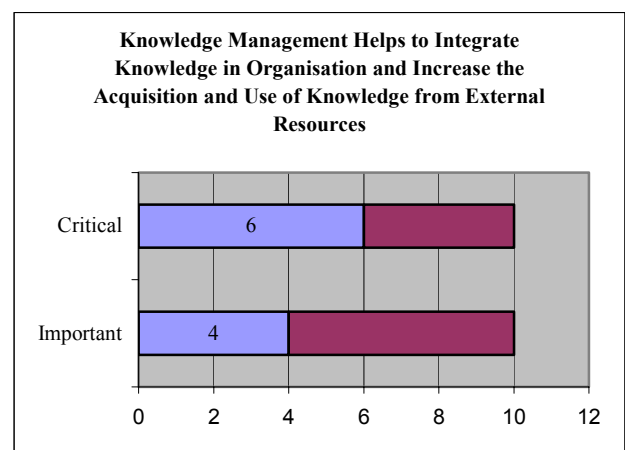


Figure 3: Knowledge Management Helps to Integrate Knowledge in Organisation and Increase the Acquisition and Use of Knowledge from External Resources

7.1.2 Increase Information Sharing or Knowledge Transfer with Share Partner, Allied Member, and Consortia and Increase Efficiency by Using Knowledge to Boost Production

The analysis (Figure 4) showed that all respondents (100%) agreed that KM practice could increased the information sharing or transfer with share partner, allied member or

consortia. It is also believed that KM is able to increase efficiency by bay of using knowledge in order to boost production. These reasons has also induced respondents to engaged with KM matters.

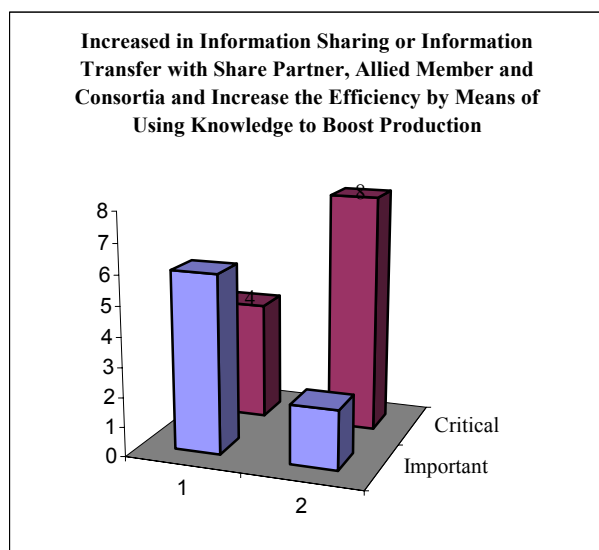


Figure 4: Increased in Information Sharing or Information Transfer with Share Partner, Allied Member and Consortia and Increase the Efficiency by Means of Using Knowledge to Boost Production

7.1.3 Protects Organisation from Losing Knowledge as the Result of Retrenchment and to Train Workers to Meet the Strategic Objective of the Organisation

Figure 5 reveals that all respondents (100%) contended that protecting organisation from losing knowledge due to retrenchment as another reason for adopting KM practice. It is also observed that KM could serve as a basis in providing training to staff in order to gear them to meet the organisational strategic objectives.



Figure 5: Protects Organisation from Knowledge Lost Due to Retrenchment and Trained Workers to Meet Organisational Strategic Objectives

7.1.4 Increase Workers' Acceptance Towards Innovation

Figure 6 indicates that 8 (80%) respondents agreed that KM is able to increasing workers' acceptance towards innovations while 2 respondents reported increase in workers' acceptance towards innovations as less important. Analysis also revealed that 9 (90%) respondents perceived that KM practice could increase staffs' capability and competencies. Only 1 (10%) respondent reported increase the workers capability as less important.

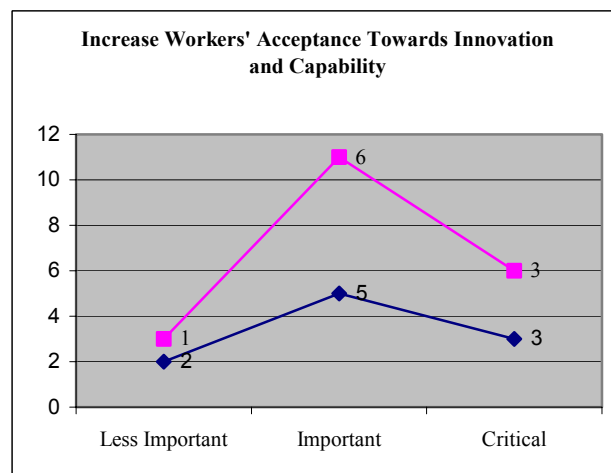


Figure 6: Increase Workers' Acceptance Towards Innovation and Capability

7.1.5 Indentify and Protect Strategic Knowledge Represented in Organisation

Data analysis indicates that all respondents (100%) agreed that KM is able in identifying and protecting strategic knowledge represented in organization. This is shown in Table 1 below.

Table 1: Identify and Protect Strategic Knowledge Represented in Organisation

Item	Frequency	Percentage (%)
Important	7	70.0
Critical	3	30.0
Total	10	100.0

7.1.6 Facilitate Project Collaboration or Physically Separated Team and Encourage Knowledge Sharing and Transfer with Customer

Only 1 (10%) (Table 2) respondent reasoned out that KM could facilitate collaborative project or team physically separated as critical whilst 3 (30%) respondents reported as important, 5 (50%) as less important, and 1(10%) as not important. This shows only 4 (40%) respondents reported the KM could facilitate collaborative project or team physically separated as among the reason for adopting KM practice.

and helps to add more new variations to products and services.

Table 2: Facilitate Collaborative Project or Team Physically Separated and Encourage Knowledge Sharing and Transfer with Customer

Item	Facilitate Project/Team Physically Separated		Encourage Knowledge Sharing and Transfer with Customer	
	Frequency	Percentage	Frequency	Percentage
Not Important	1	10	1	10
Less Important	5	50	1	10
Important	3	30	3	30
Critical	1	10	5	50
Total	10	100	10	100

8 (80%) respondents stipulated that KM could encourage knowledge sharing or transfer with customer. This is accepted as part of the reason for adopting KM practice. 1 (10%) respondent regarded the encouragement of knowledge sharing or transfer as less important whilst 1 (10%) contended as not important.

7.2 The Effects Resulting from Adopting Knowledge Management Practice

Analysis is carried out in order to identify what is the effect and the level of its effectiveness as a result of adopting KM practice. Below are the effects.

7.2.1 Increase Both Knowledge Sharing Horizontally (through Departments, Function and Business Units) and Vertically (Organisational Hierarchy)

From the analysis, it is learned that all 10 (100%) respondents reported that KM could yield several effects to organization that adopted the practice. Organisations could experience in the increased of knowledge sharing horizontally (through department, function and business units) by in practising KM. In addition, all commercial banks in Malaysia also asserted that KM could increased knowledge sharing vertically particularly on the organizational hierarchy. Furthermore, it is advocated that KM practice could also increased the efficiency of workers and/or productivity, skill and knowledge (100%).

7.2.2 Increase the Number of Markets (Geographical Location), Helps to Add New Variations in Products and Services

Table 3 shows 9 (90%) respondents contended that KM practice has resulted in increasing the number of potential markets in terms of geographical location. Only 1 (10%) respondent said this effect as less effective. In the contrary, all respondents agreed that the effect of KM to organisation is improve in the relation between organisation and customers,

Table 3: Increase the Number of Market (Geographical Location), Helps to Add New Variations in Products and Services

Item	Increasing the Number of Market		Helps to Add New Variations in Products and Services	
	Frequency	Percentage	Frequency	Percentage
Less Effective	1	10	-	-
Effective	4	40	5	50
Very Effective	5	50	5	50
Total	10	100	10	100

7.2.3 Increase Product Adaptation or Services to that of Customers' Requirement

Figure 7 shows 9 (90%) respondents mentioned that KM practice could resulted in increasing the product adaptation or services to that of customers' requirement. Only 1 (10%) regards this factor as less effective.

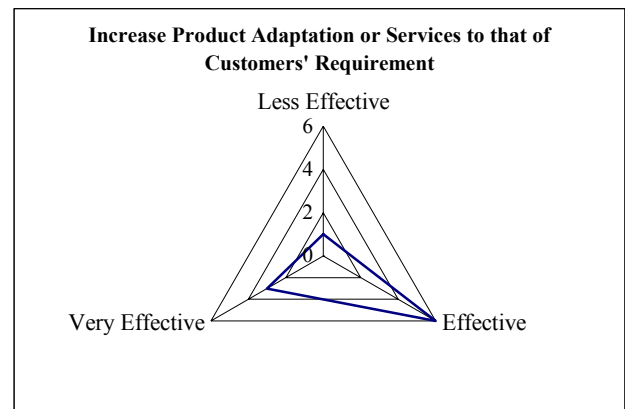


Figure 7: Increase Product Adaptation or Services to that of Customers' Requirement

7.2.4 Increase the Flexibility in Production and Innovation

9 (90%) (Figure 8) respondents reported that KM could give effect by increasing the flexibility in production and innovation. Only 1 (10%) respondent reported that this particular effect as less effective.

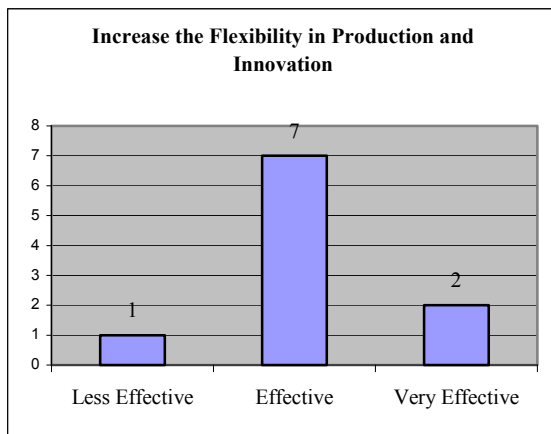


Figure 8: Increase the Flexibility in Production and Innovation

7.2.5 Increase in the Organisation or Corporate Knowledge

Figure 9 indicates that 8 (80%) respondents affirmed the effect that KM practice could yield is increase in the level of organisation or corporate knowledge. Only 2 (20%) regards the same effect as less effective.

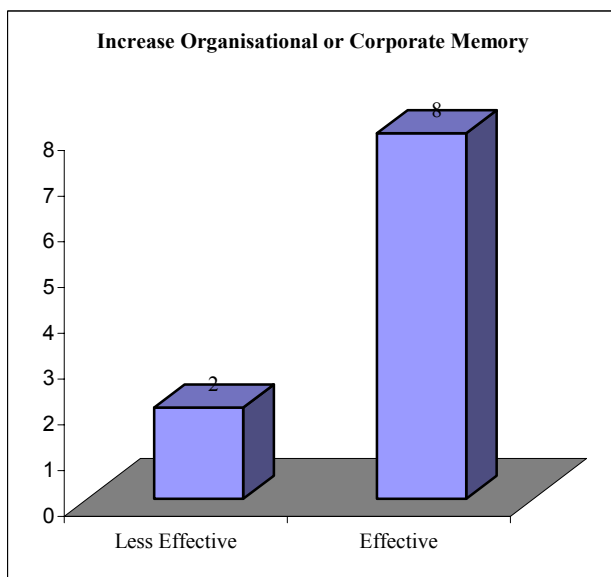


Figure 9: Increase Organisational or Corporate Memory

7.2.6 Eliminating Similar Research and Development and Increase the Capability to Acquire Knowledge from Public Research Institutions Including Universities and Government Research Institute

From the analysis (Table 4), 5 (50%) respondents chose that one of the effect that KM could give to organisation is eliminating similar R & D though another 5 (50%) disagreed by reporting that this particular effect as less effective.

Table 4 : Eliminating Similar Research and Development and Increase the Capability to Acquire Knowledge from Public Research Institutions Including Universities and Government Research Institute

	Eliminating the Same R & D		Capability in Acquiring Knowledge From Public Research Institute Including Universities and Government Research Institute	
Item	Frequency	Percentage	Frequency	Percentage
Less Effective	5	50	4	40
Effective	5	50	6	60
Total	10	100	10	100

It is also indicated that 6 (60%) respondents pointed out that one of the results in implementing KM practice is that this endeavor could potentially increase the capability of organization to acquire knowledge from public research institutions such as the universities and government sponsored research institutes. Only 4 (40%) respondents felt that this effect as less effective.

7.2.7 Increase the Ability to Acquire Knowledge from Other Businesses, Industrial Association and Technical Literature

Analysis (Figure 10), shows that 9 (90%) of respondents reported KM could result in increasing the knowledge acquisition from other organisations particularly businesses, industrial association and also from the available technical literature. However this effect is not agreed by 1 (10%) respondent who regards this as as less important.

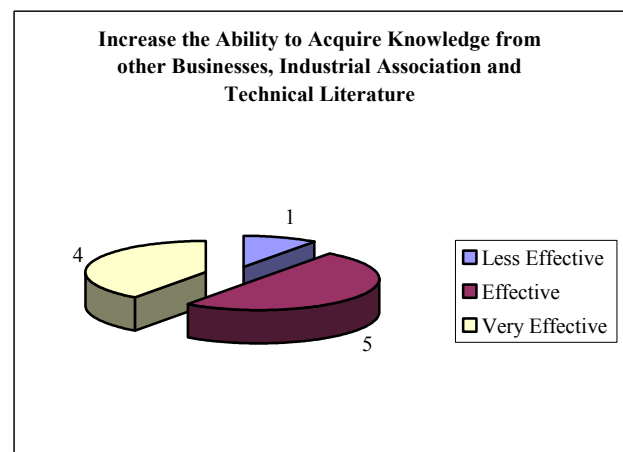


Figure 10: Increase the Ability to Acquire Knowledge from other Businesses, Industrial Association and Technical Literature

7.2.8 Increase the Staff Participation in Activities at Workplace

From the analysis (Figure 11), 9 (90%) of the local commercial banks in Malaysia reported that KM could also marked the increase in staff participation in activities at

workplace. Only 1 (10%) of respondent reports this effect as less effective.



Figure 11: Increase Staff Participation in Activities at Workplace

8.0 DISCUSSION AND CONCLUSION

The study affirmed that all the factors perceived to be the causes for implementing KM practice in local commercial banks in Malaysia are finally the very same factors that made this endeavor in the industry viable. This finding is similar to that of Earl (2001), Edler (2002) and Danish KM Project (2002) who carried out their studies much earlier. The perceived causes also the determined factors in adopting KM practice.

The second finding is also similar to that by Edler (2002) and Earl (2001) who assert that the main reason for organisation to adopt KM practice is to be more competitive. Knowledge is used to increase efficiency and production process besides protecting organisation from losing knowledge due to retrenchment. Earl (2001) found that consultancy firms such as Arthur Andersen too, choosed protecting organization from losing knowledge as a result of retrenchment as the main reason for implementing KM. KM practice could also be a platform in providing training to workers. This intention of providing training is twofolds. First, to prepare workers to meet organizational strategic objectives and second, to nurture knowledge workers. Thus, knowledge integration, acquisition of external knowledge and knowledge sharing become part of the reasons why KM practice ought to be put in place by local commercial banks in Malaysia.

8.1 The Effect of Knowledge Management Practice

The study also revealed that KM practice could effect the local commercial banks in Malaysia. However these banks are rather selective in determining the effect. This is in parallel to the findings by Edler (2002) and Danish KM Project (2002) who contended that there were positive effects resulting from KM practice especially those service-based organisations.

All respondents also agreed that KM practice could result in increased in knowledge sharing horizontally (through

department, function and business units). This is again not contrasting Edler (2002) who discovered that organisations benefit from sharing knowledge among the departments within the organisation. The Danish KM Project (2002) too, advocated that KM practice could increase knowledge sharing between departments and functions. The increase in workers' efficiency, skills and customer relations are another three effects potentially yielded from the practice. Earl (2001) asserts that KM practice could benefit both the organisations and the workers. KPMG (1999) reported that customer relations were usually good if customers' requirement were managed systematically by means of adopting KM practice.

The increased in knowledge sharing vertically on organizational hierarchy, and the multiplication in the number of markets (geographical location), help to add new variations in the products and services. Interestingly, KM practice could also induced workers involvement in workplace activities. The increase in knowledge acquisition from other businesses, industrial association and technical literature other than product adaptation or services to that of the customers' requirement, flexibility in the production and innovation are also other effects could gained from the practice. The increase in the level of knowledge or corporate organisation, eliminating similar research and development, increasing the capability to acquire knowledge from public research institutions are also identified as parts of the potential effects expected from implementing KM practice.

It can be concluded that KM practice could equipped local commercial banks in Malaysia to be competitive and in the ever ready state to face challenges amid financial liberalization. Factors that stimulate KM practice could also be a basis to shift from service-oriented bank to that of knowledge-based institutions which finally accelerate the formation of knowledge society and the materialization of K-Economy as laid out in Vision 2020.

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